

|   |                                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
|---|--------------------------------|--|---------------------|--------------------|-----------------|-----------------------------------|--------|------------------------------|-----------------------------|-----------------|--|--------------------------------|--|--|------|------------|-------|----|---------|--------------------------|----------|-------|--|-----------|--------------|-----|--|--|--|--------------|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>   |                                | <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%;">Attorney Docket No.</td><td>60,246-245; 10,754</td></tr><tr><td>First Inventor</td><td>Dobmeier, Thomas J.</td></tr><tr><td>Title</td><td>Expansion Device with Low...</td></tr><tr><td>Express Mail Label No.</td><td>EV 221421993 US</td></tr></table>   | Attorney Docket No. | 60,246-245; 10,754 | First Inventor  | Dobmeier, Thomas J.               | Title  | Expansion Device with Low... | Express Mail Label No.      | EV 221421993 US | <div style="writing-mode: vertical-rl; transform: rotate(180deg);">2286 U.S. PTO<br/>10/695123</div> |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Attorney Docket No.   | 60,246-245; 10,754             |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| First Inventor  | Dobmeier, Thomas J.            |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Title   | Expansion Device with Low...   |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Express Mail Label No.  | EV 221421993 US                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <b>APPLICATION ELEMENTS</b><br><small>See MPEP chapter 600 concerning utility patent application contents.</small>  |                                | <b>ADDRESS TO:</b><br>Mail Stop Patent Application<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria VA 22313-1450  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <div style="display: flex; flex-wrap: wrap;"><div style="width: 50%;"><p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br/><small>(Submit an original and a duplicate for fee processing)</small></p><p>2. <input type="checkbox"/> Applicant claims small entity status.<br/><small>See 37 CFR 1.27.</small></p><p>3. <input checked="" type="checkbox"/> Specification <span style="float: right;">[Total Pages <u>13</u>]</span><br/><small>(preferred arrangement set forth below)</small><ul style="list-style-type: none"><li>- Descriptive title of the invention</li><li>- Cross Reference to Related Applications</li><li>- Statement Regarding Fed sponsored R &amp; D</li><li>- Reference to sequence listing, a table, or a computer program listing appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings (if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul></p><p>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <span style="float: right;">[Total Sheets <u>1</u>]</span></p><p>5. Oath or Declaration <span style="float: right;">[Total Sheets <u>4</u>]</span><br/>a. <input checked="" type="checkbox"/> Newly executed (original or copy)</p><p style="margin-left: 20px;">b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))<br/><small>(for continuation/divisional with Box 18 completed)</small></p><p style="margin-left: 20px;">i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br/><small>Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</small></p><p>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p></div><div style="width: 50%;"><p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</p><p>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)<br/>a. <input type="checkbox"/> Computer Readable Form (CRF)</p><p style="margin-left: 20px;">b. Specification Sequence Listing on:<br/>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br/>ii. <input type="checkbox"/> Paper</p><p style="margin-left: 20px;">c. <input type="checkbox"/> Statements verifying identity of above copies</p></div></div> |                                | <b>ACCOMPANYING APPLICATION PARTS</b><br><div style="display: flex; flex-wrap: wrap;"><div style="width: 50%;"><p>9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet &amp; document(s))</p><p>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney<br/><small>(when there is an assignee)</small></p><p>11. <input type="checkbox"/> English Translation Document (if applicable)</p><p>12. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Citations<br/><small>Statement (IDS)/PTO-1449</small></p><p>13. <input type="checkbox"/> Preliminary Amendment</p><p>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br/><small>(Should be specifically itemized)</small></p><p>15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br/><small>(if foreign priority is claimed)</small></p><p>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</p><p>17. <input checked="" type="checkbox"/> Other: <u>Certificate of Express Mail</u>.....</p></div><div style="width: 50%;"></div></div> |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <p>18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:</p> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Continuation</div><div><input type="checkbox"/> Divisional</div><div><input type="checkbox"/> Continuation-in-part (CIP)</div><div>of prior application No.: .....</div></div> <p><small>Prior application information: Examiner _____ Art Unit: _____</small></p> <p><b>For CONTINUATION OF DIVISIONAL APPS only:</b> The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts.</p>   |                                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <b>19. CORRESPONDENCE ADDRESS</b>   |                                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <div style="display: flex; align-items: center;"><input checked="" type="checkbox"/> Customer Number: <span style="border: 1px solid black; padding: 2px 20px;">026096</span></div> <div style="display: flex; justify-content: flex-end; align-items: center; margin-top: 5px;"><b>OR</b> <input type="checkbox"/> Correspondence address below</div>  |                                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 20%;">Name</td><td colspan="3">David J. Gaskey</td></tr><tr><td rowspan="2">Address</td><td colspan="3">Carlson Gaskey &amp; Olds, P.C.</td></tr><tr><td colspan="3">400 West Maple Road, Suite 350</td></tr><tr><td>City</td><td>Birmingham</td><td>State</td><td>MI</td></tr><tr><td>Country</td><td>United States of America</td><td>Zip Code</td><td>48009</td></tr><tr><td></td><td>Telephone</td><td>248-988-8360</td><td>Fax</td></tr><tr><td></td><td></td><td></td><td>248-988-8363</td></tr></table>  |                                |  |                     | Name               | David J. Gaskey |                                   |        | Address                      | Carlson Gaskey & Olds, P.C. |                 |  | 400 West Maple Road, Suite 350 |  |  | City | Birmingham | State | MI | Country | United States of America | Zip Code | 48009 |  | Telephone | 248-988-8360 | Fax |  |  |  | 248-988-8363 |
| Name  | David J. Gaskey                |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Address   | Carlson Gaskey & Olds, P.C.    |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
|   | 400 West Maple Road, Suite 350 |  |                     |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| City  | Birmingham                     | State  | MI                  |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Country   | United States of America       | Zip Code   | 48009               |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
|   | Telephone                      | 248-988-8360   | Fax                 |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
|   |                                |  | 248-988-8363        |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 40%;">Name (Print/Type)</td><td>David J. Gaskey</td><td style="width: 20%;">Registration No. (Attorney/Agent)</td><td>37,139</td></tr><tr><td>Signature</td><td></td><td>Date</td><td>10/28/2003</td></tr></table>  |                                |  |                     | Name (Print/Type)  | David J. Gaskey | Registration No. (Attorney/Agent) | 37,139 | Signature                    |                             | Date            | 10/28/2003   |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Name (Print/Type)   | David J. Gaskey                | Registration No. (Attorney/Agent)  | 37,139              |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |
| Signature   |                                | Date   | 10/28/2003          |                    |                 |                                   |        |                              |                             |                 |  |                                |  |  |      |            |       |    |         |                          |          |       |  |           |              |     |  |  |  |              |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 810.00)

**Complete if Known**

|                      |                    |
|----------------------|--------------------|
| Application Number   | Herewith           |
| Filing Date          | Herewith           |
| First Named Inventor | Dobmeier, et al.   |
| Examiner Name        |                    |
| Art Unit             |                    |
| Attorney Docket No.  | 60,246-245; 10,754 |

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

03-0835

Carrier

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description        | Fee Paid |
|-------------------------------|-------------------------------|------------------------|----------|
| 1001 770                      | 2001 385                      | Utility filing fee     | 770.00   |
| 1002 340                      | 2002 170                      | Design filing fee      |          |
| 1003 530                      | 2003 265                      | Plant filing fee       |          |
| 1004 770                      | 2004 385                      | Reissue filing fee     |          |
| 1005 160                      | 2005 80                       | Provisional filing fee |          |

SUBTOTAL (1) (\$ 770.00)

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------|--------------|----------------|----------|
| 18           | -20** =      | X              | 0.00     |
| 3            | -3** =       | X              | 0.00     |

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description  |
|-------------------------------|-------------------------------|--|
| 1202 18                       | 2202 9                        | Claims in excess of 20                                     |
| 1201 86                       | 2201 43                       | Independent claims in excess of 3                          |
| 1203 290                      | 2203 145                      | Multiple dependent claim, if not paid                      |
| 1204 86                       | 2204 43                       | ** Reissue independent claims over original patent         |
| 1205 18                       | 2205 9                        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ 0.00)

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity - Small Entity

| Fee Code    | Fee (\$) | Fee Code    | Fee (\$) | Fee Description  | Fee Paid |
|-------------|----------|-------------|----------|--|----------|
| 1051 130    |          | 2051 65     |          | Surcharge - late filing fee or oath  |          |
| 1052 50     |          | 2052 25     |          | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130    |          | 1053 130    |          | Non-English specification  |          |
| 1812 2,520  |          | 1812 2,520  |          | For filing a request for ex parte reexamination                            |          |
| 1804 920*   |          | 1804 920*   |          | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840* |          | 1805 1,840* |          | Requesting publication of SIR after Examiner action                        |          |
| 1251 110    |          | 2251 55     |          | Extension for reply within first month                                     |          |
| 1252 420    |          | 2252 210    |          | Extension for reply within second month                                    |          |
| 1253 950    |          | 2253 475    |          | Extension for reply within third month                                     |          |
| 1254 1,480  |          | 2254 740    |          | Extension for reply within fourth month                                    |          |
| 1255 2,010  |          | 2255 1,005  |          | Extension for reply within fifth month                                     |          |
| 1401 330    |          | 2401 165    |          | Notice of Appeal   |          |
| 1402 330    |          | 2402 165    |          | Filing a brief in support of an appeal                                     |          |
| 1403 290    |          | 2403 145    |          | Request for oral hearing   |          |
| 1451 1,510  |          | 1451 1,510  |          | Petition to institute a public use proceeding                              |          |
| 1452 110    |          | 2452 55     |          | Petition to revive - unavoidable   |          |
| 1453 1,330  |          | 2453 665    |          | Petition to revive - unintentional   |          |
| 1501 1,330  |          | 2501 665    |          | Utility issue fee (or reissue)   |          |
| 1502 480    |          | 2502 240    |          | Design issue fee   |          |
| 1503 640    |          | 2503 320    |          | Plant issue fee  |          |
| 1460 130    |          | 1460 130    |          | Petitions to the Commissioner  |          |
| 1807 50     |          | 1807 50     |          | Processing fee under 37 CFR 1.17(q)  |          |
| 1806 180    |          | 1806 180    |          | Submission of Information Disclosure Stmt                                  |          |
| 8021 40     |          | 8021 40     |          | Recording each patent assignment per property (times number of properties) | 40.00    |
| 1809 770    |          | 2809 385    |          | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 770    |          | 2810 385    |          | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 770    |          | 2801 385    |          | Request for Continued Examination (RCE)                                    |          |
| 1802 900    |          | 1802 900    |          | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

**SUBMITTED BY**

Name (Print/Type)

David J. Gaskey

Registration No.

37,139

(Complete if applicable)

Telephone 248-988-8360

Signature

Date

10/28/2003

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Dobmeier, et al.  
Serial No.: Herewith  
Filed: Herewith  
Title: EXPANSION DEVICE WITH LOW  
REFRIGERANT CHARGE MONITORING

**EXPRESS MAIL CERTIFICATE**

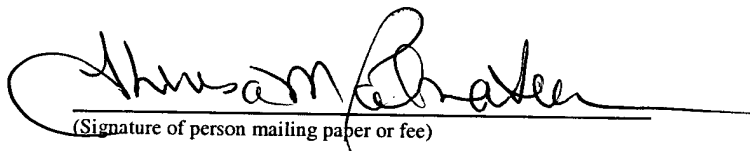
"Express Mail" Label Number: EV 221421993 US

Date of Deposit: October 28, 2003

I hereby certify that the attached documents or fees are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to "Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450."

Theresa M. Palmateer

(Typed or printed name of person mailing paper or fee)

  
(Signature of person mailing paper or fee)

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EV221421993US